

April 25, 2014

Agile, Lean, & Project Management

How do they all fit together?

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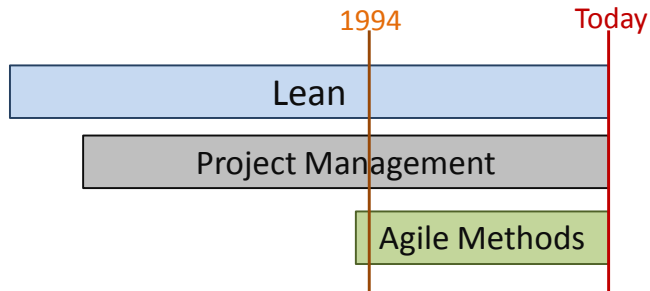
Speaker Introduction



- Background in understanding complex adaptive systems
- 20 years experience developing and delivering software
- Learned about Lean and Agile by implementing as a manager
- Founded SoTech in 2008
- Long-term focus on capabilities; deliver results in the short-term



How do they all fit together?



Topical Approach

- A. Historic Context
- B. Unique Contributions
- C. Questions and Answers

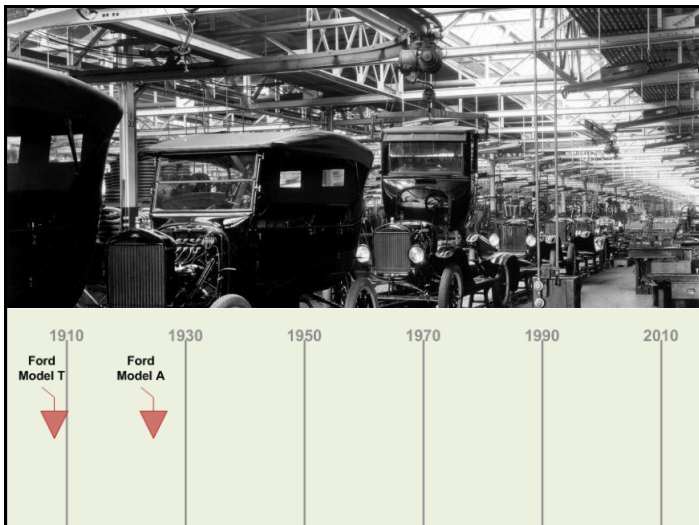
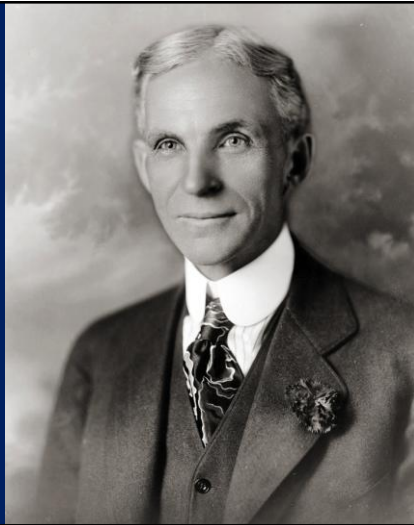
Software's Chronic Crisis



Questions

- How do Lean, Project Management, and Agile approaches compare?
- How has each contributed to addressing software's chronic crisis?

LEAN

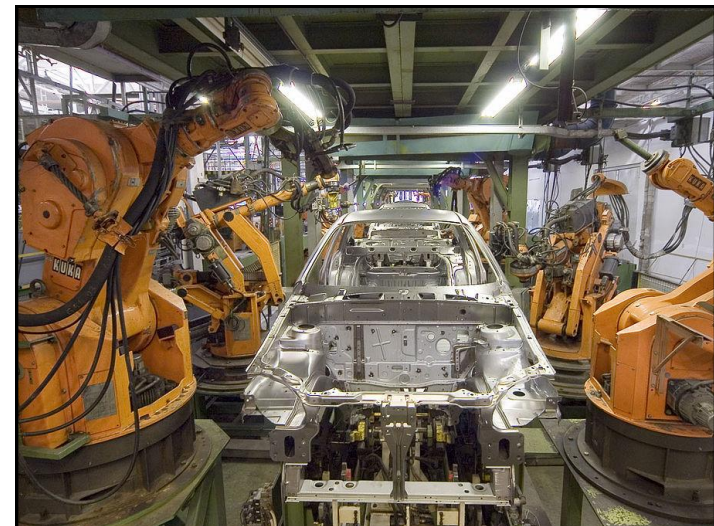
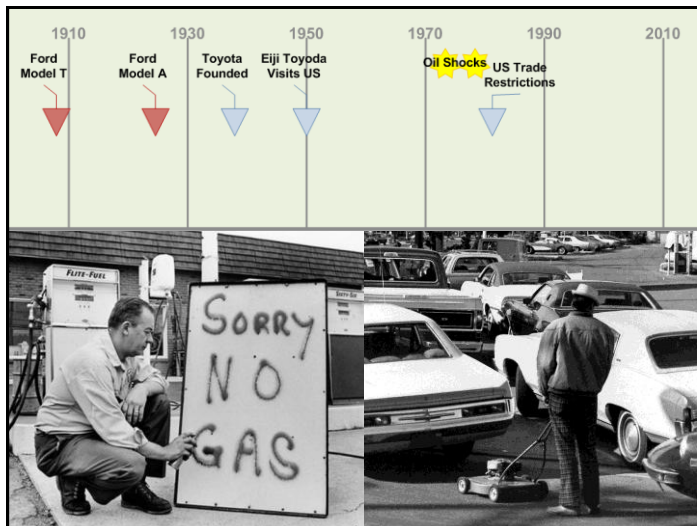
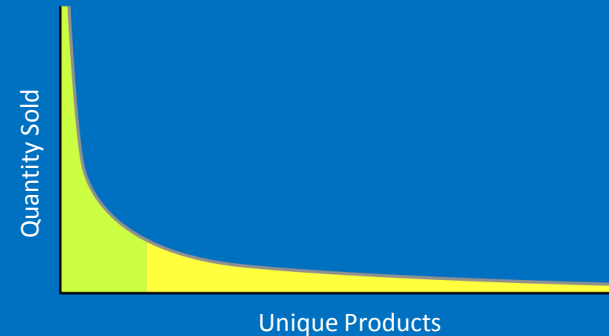


Early circumstances at Toyota

Limited capital – post-war reconstruction
Small domestic market – needed to produce many models
Simple, general-purpose equipment

...There was no economic basis for large batches

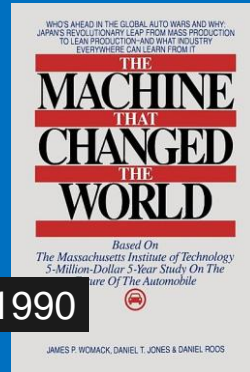
The Long Tail



Introduced Toyota Production System to the west
Coined the term "Lean"

The Machine That Changed The World

Womack, Jones, Roos



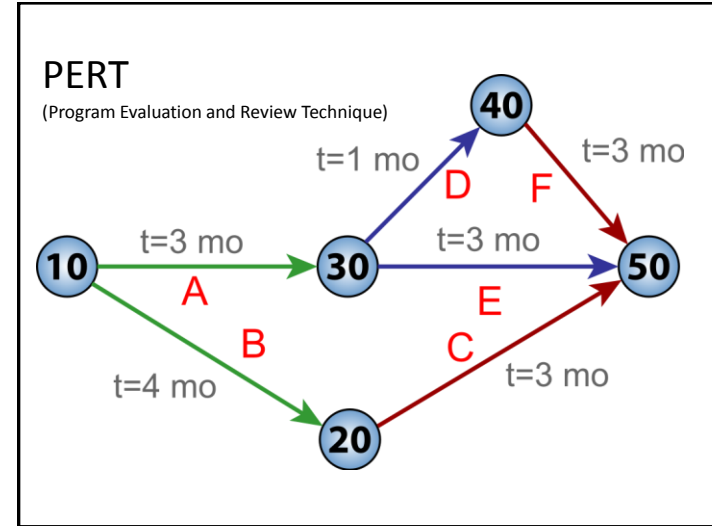
Lean focuses on removing obstacles to flow

Value comes from what the customer will pay for
Anything that doesn't contribute to customer value presents an obstacle

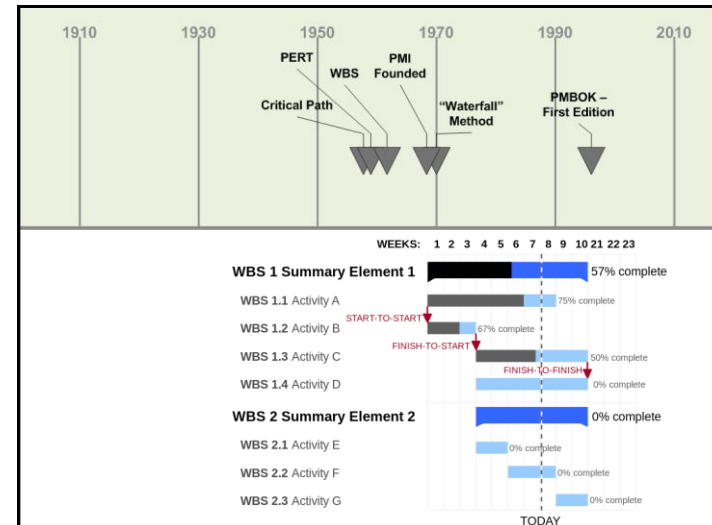


Lean Q & A

- Are conditions in your market most similar to what faced Ford, GM, or Toyota?

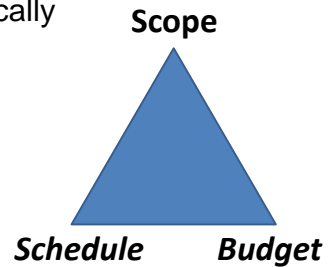


PM Certification

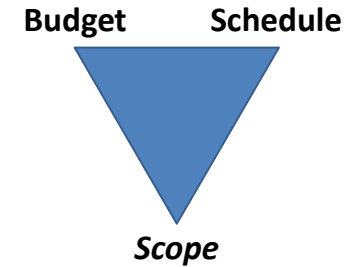


PM Q & A

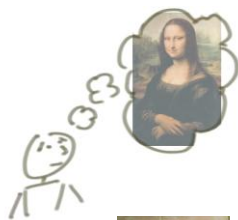
- Is your customer willing to pay for project management?
- Which variable is typically most flexible in your projects?



AGILE METHODS



“incrementing” builds a bit at a time



But, incrementing calls for a fully formed idea



27 Courtesy of Jeff Patton

“iterating” builds a rough version, validates it, then slowly builds up quality



Iterating allows you to move from vague idea to realization



28 Courtesy of Jeff Patton

Extreme Programming

Inspired by object-oriented technology and shortening market cycles

Developed by Kent Beck and others beginning on a large project at Chrysler

If a practice is effective, take it to the extreme!

1996



Scrum

2001

Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it.
Through this work, we have come to value:

Individuals and interactions over processes and tools
Working software over comprehensive documentation
Customer collaboration over contract negotiation
Responding to change over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

Agile Manifesto

Kent Beck
Mike Beedle
Arie van Bennekum
Alistair Cockburn
Ward Cunningham
Martin Fowler

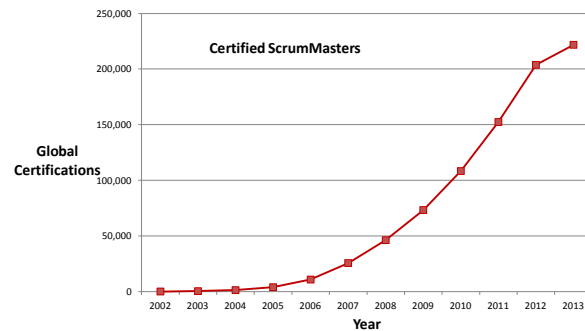
James Grenning
Jim Highsmith
Andrew Hunt
Ron Jeffries
Jon Kern
Brian Marick

Robert C. Martin
Steve Mellor
Ken Schwaber
Jeff Sutherland
Dave Thomas

1995



Spread of Scrum certification



Source: [http://www.scrumalliance.org/certifications/practitioners/certified-scrummaster-\(csm\)](http://www.scrumalliance.org/certifications/practitioners/certified-scrummaster-(csm))

Manifesto for Agile Software Development



Kent Beck
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Dave Thomas

Agile = An adaptive way of working

- Keep scope truly variable
- Defer detailed planning
- Reduce batch size by releasing incrementally
- Maximize the value of work not done

Agile Q & A

- Are Scrum and Agile the same thing?
- Did Agile come from Lean?



Weathering the Chronic Crisis

- Project Management: Manage risks
- Lean: Understand the system, then automate
- Agile: Iterate, adapt to feedback

Mindset, Not Methodology



Attend Upcoming Webinar

May 30

Plan to Re-Plan: Using Adaptive Planning and Agile Methods to Deliver Value from an Advanced Infrastructure Project

Contact Me

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